

(12) **United States Patent**
Wang

(10) **Patent No.:** **US 9,410,682 B1**
(45) **Date of Patent:** **Aug. 9, 2016**

(54) **ASSEMBLED LIGHTING STRUCTURE FOR A PANEL OF A SHELF**

(71) Applicant: **ED520 ENTERPRISE CO., LTD.**,
Changhua (TW)

(72) Inventor: **Yu-Lin Wang**, Changhua (TW)

(73) Assignee: **ED520 ENTERPRISE Co., Ltd.**, Puyan
Township, Changhua County (TW)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 46 days.

(21) Appl. No.: **14/659,439**

(22) Filed: **Mar. 16, 2015**

(51) **Int. Cl.**
F21V 21/34 (2006.01)
F21V 19/00 (2006.01)
F21Y 103/00 (2016.01)
F21W 131/405 (2006.01)

(52) **U.S. Cl.**
CPC **F21V 21/34** (2013.01); **F21V 19/003**
(2013.01); **F21W 2131/405** (2013.01); **F21Y**
2103/003 (2013.01)

(58) **Field of Classification Search**
CPC **F21V 21/34**; **F21V 19/003**
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2016/0061429 A1* 3/2016 Waalkes et al. F21V 23/00
362/217.15

* cited by examiner

Primary Examiner — David V Bruce

(74) *Attorney, Agent, or Firm* — Yuwen Guo

(57) **ABSTRACT**

An assembled lighting structure for a panel of a shelf is provided. The structure comprises a connection unit, a receiving unit, a LED assembly, a first clip unit, and a second clip unit. The connection unit is connected with an outside of a front-edge groove. The receiving unit is connected with one side of the panel distant from the connection unit and inclined upwardly and outwardly. The LED assembly is arranged at an upper surface of the receiving unit. Lights of the LED assembly are emitted toward inside the panel. The first clip unit is connected with one end of the receiving unit distant from the connection unit for providing a first display strip to be removably clipped and fastened. The second clip unit is extended from a bottom end of the receiving unit downwardly for providing a second display strip to be removably clipped and fastened.

8 Claims, 14 Drawing Sheets

